

Sleep Breathing Disorders

DETERMINING THE IMPACT OF VERTICAL DIMENSION ON THE MANDIBULAR RANGE OF MOTIONS IN YOUNG ADULTS: A CONSIDERATION FOR THE DESIGN AND THE CONSTRUCTION OF A MANDIBULAR ADVANCEMENT DEVICE

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Introduction: The aim of this study was to determine the impact of the increase of vertical dimension on the range of mandibular movements in young adults. According to literature, different anterior vertical openings have been used for the design of MADs and there is still no evidence on the impact of vertical movements on the capability of the patient to advance the mandible.

Materials and methods: The research was conducted on 75 students, aged 19 to 23 years (mean 21.3, SD 1.7, 37 female and 38 male). All the subjects were asymptomatic for Temporomandibular Disorders, according to the Research Diagnostic Criteria/ Temporomandibular Disorders RDC/TMD, RDC /TMD. One investigator performed all the measurements of the mandibular retrusion and protrusion with George Gauge using bite forks with different interincisal distances of 2 mm, 5 mm, 8 mm and 11 mm. Statistical analyses were done with SPSS (Statistical Package for the Social Sciences) on version 17 and the STAT on version 11.

Results: Mean value for maximum retrusion were: -5,0 mm with the 2 mm bite fork (n 175, range -3 to -8,5 mm; SD 1,33 mm), -5,5 mm with the 5 mm bite fork (n 175, range -3 to -9 mm SD 1,31 mm), -6,4 mm with the 8 mm bite fork (n 75, range -3 to -9 mm; SD 1,35 mm) and -6,1 mm with the 11 mm bite fork (n 75, range -3 to -10 mm; SD 1,70 mm). Results show an higher value of maximum retrusion, increasing vertical dimension. This is expected, due to the clockwise rotation of the mandible described by the Posselt diagram. The values of maximum protrusion were: +7,0 mm with the 2 mm bite fork (range 3,5 to 10,0 mm; SD 1,37 mm), 6,5 mm with the 5 mm bite fork (range 3 to 10 mm; SD 1,36 mm); 4,9 mm with the 8 mm bite fork (range 1,5 to 7,0 SD 1,48 mm) and 3,8 mm with the 11 mm bite fork (range 0 to 7,5 mm; SD 1,92 mm). Results show the tendency, according to the Posselt diagram, to achieve less protrusion with the increase of vertical opening.

Conclusions: The increase of vertical opening, induce a clockwise rotation of the mandible as described by Posselt and this can reduce the degree of the advancement designed with a the MAD. Results suggest that minimizing bite opening may be useful to , increase maximum protrusion. We described the range of mandibular maximum protrusion and retrusion according to different vertical positions. A larger population study can aid an important information to customize MADs.

Other

PALATOPHARYNGEAL SURGERY IN OBSTRUCTIVE SLEEP APNOEA-HOW I DO IT

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Introduction: Sleep Medicine is a medical subspecialty devoted to the diagnosis and management of sleep disturbances and disorders. Obstructive sleep apnoea is the most common type of sleep apnoea and is caused by obstruction of upper airway. Palatopharyngeal surgery is the commonest surgical procedure done to successfully relief airway obstruction.

Material and methods: In the clinical presentation of snoring, daytime sleepiness, morning mood changes like irritability anxiety depression, forgetfulness, increase heart rate and blood pressure, weight gain, heartburn and gastroesophageal reflux disorders, hypoxemia, decreased sex drive, diabetes ,thick neck, mostly male over forties, patients were assessed by Polysomnography. Obstructive sleep apnoea diagnosed and severity assessed. Treatment options of weight reduction, lifestyle changes, physical intervention of positive airway pressure by CPAP, Auto CPEP, discussed and applied and used .Appropriate selected patients were offered surgical treatment to modify upper airway anatomy with the hope of unobstructed

free silenced flow of air through nose and pharynx. Nasal surgery is straightforward to correction of any deviation of septum with reduction of turbinates if necessary. Pharyngeal surgery starting with uvulotomy, reduction of posterior pillars, Tonsillectomy, Uvulopalatopharyngoplasty, Zeeta-plasty, expansion pharyngoplasty, Base of the tongue reduction was done using monopolar diathermy of Bialy Lab {Diathermy}with usefully designed needle where Hi Tack like LASER, Coablation, Radiofrequency is not available. **Results:** 120 patients of age ranging from 24–60 years were operated and followed up for 5 years. Postoperative results and steps of surgery using monopolar needle will be documented.

Conclusions: A number of surgical procedures of sleep surgery could safely be performed by using Proper Diathermy Machine, with little hazards where expensive appliances like LASER, Radiofrequency, Coablation is not affordable. My recommendation is to start the procedures and with experience and time using devices become safe.

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Other

PALATOPHARYNGOPLASTY: COMPARISON OF UPPP WITH PHARYNGEAL EXPANSION SURGERY

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Results: The advantages, surgical technique, dynamics of procedure benefits of past and present procedures and results were compared among 40 cases of Uvulopalatopharyngoplasty with 80 cases of expansion pharyngoplasty and documented.

Conclusions: Though the surgical procedure suitable for every patient is a individual assessment. expansion pharyngoplasty shows far better results in improvement of airpassage and symptoms.

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Movement Disorders

EFFECTS OF DEEP BRAIN STIMULATION (DBS) OF THE PEDUNCULOPONTINE NUCLEUS (PPTG) OF THE RETICULAR ACTIVATING SYSTEM (RAS) IN PARKINSON'S DISEASE (PD): MOTOR AND NON MOTOR BENEFITS

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